

PROCEEDINGS  
OF THE  
BIOLOGICAL SOCIETY OF WASHINGTONA NEW SPECIES OF *CINARA* FROM MAINE  
(APHIDAE)

BY F. C. HOTTES

This new species was among slides of *Cinara* sent me for naming, by Mrs. M. E. MacGillivray of the Field Crop Insect Laboratory, Fredericton, N. B. Canada, and I gladly acknowledge her assistance.

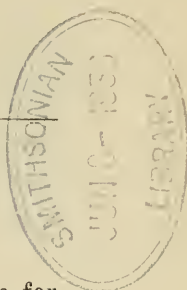
*Cinara soplada* n. sp.

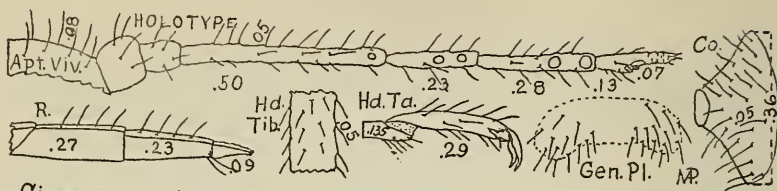
*Apterous viviparous female.*

Length from vertex to end of anal plate 3.07mm. Color notes from life not available. The single specimen from which this species is described has been cleared and mounted very flat, it indicates the head and thorax and the first antennal segment as being pale brown, femora yellowish at the extreme base, shading to brown. The metathoracic femora are much darker than the pro and mesothoracic femora, and unlike them much darker towards the apex. Tibiae brown with pale region in basal third of segment. Tarsal segments concolorous with end of tibiae. Cornicles pale brown, with extreme outer margin slightly lighter in color. Dorsum of abdomen with two rows of small wax pore plates at each side. Cauda and anal plate brown.

Head and thorax.—Antennal segments with the following lengths: III .50mm., IV .23mm., V .28mm., VI .13 + .07 mm. Sensoria distributed as follows: III with primary sensorium, no secondary sensoria, IV and V with primary sensoria and one secondary sensorium. Hair on antennae sparse, fine, sharp-pointed, upstanding, some on third segment set at ninety degrees, none less than sixty degrees. Third antennal segment with short region near apex brownish, fourth and fifth segments similar, but with the brown more extensive, sixth segment uniform brown. Apical half of fourth, and all of fifth and sixth antennal segments very weakly imbricated, the imbrications being so poorly developed that they have to be looked for. Median suture of head not much darker than adjacent area. Ocular tubercles small but very distinct. Rostrum retracted, so that its length can only be estimated to reach slightly beyond cornicles, the last three segments measuring as follows: .27, .23 and .09mm. Hind femora 1.44mm. long, provided with rather coarse hairs which are about one fifth as long as the width of the femora. Hind tibiae 2.03mm. in length, with hairs rather coarse, the hairs on the outer margin being rather dull at the end, the hairs on the inner margin being sharp-pointed. The hairs on the outer margin are about .05mm. long, and are spaced farther apart than their length, which is slightly less than one half the width of the tibiae. Hairs near apex of tibiae not more numerous than elsewhere, with those on the ventral apex very short.

First tarsal segment of hind tarsus .135mm. in length, provided with



*Cinara soplada*

about eleven hairs of the ventral surface, second tarsal segment .29mm. long, hairs on the dorsal and ventral surfaces of this segment similar, but less numerous on the dorsal surface. Abdomen.—Cornicles .36mm. across, with outer margin quite regular, hairs on cornicles uniformly distributed over the surface, and not more numerous on the constricted area. Dorsum of abdomen almost free from hairs, this fact is very difficult to determine because the specimen is very compressed, the few hairs present are extremely short. Hairs on the ventral surface of the abdomen fine, sharp-pointed, not numerous, for the most part farther apart than their length. Genital plate broadly excavated along the posterior margin, the hairs on this structure are confined to the ends. Pigmented spots anterior to the cauda divided with a single row of about five hairs along the posterior margin. Cauda and anal plate provided with well developed setulose surfaces. Hairs on cauda confined largely to the posterior margin. Long hairs on cauda and anal plate arising from extremely well developed wart-like tubercles.

Because of the short blunt tipped hairs on the outer margin of the hind tibiae, I suspect that most Aphid workers would take one look at this species and determine it as *Cinara coloradensis* (G) which also has *Picea* for a host. Actually *C. soplada* differs greatly from *C. coloradensis* and may be differentiated from it at once by the fact that the hairs on the cornicles are uniformly distributed over the surface and not confined to the constricted area as they are in *C. coloradensis*, cleared specimens of which also show the cornicles to be two toned. *C. coloradensis* also has the last segments of the antennae strongly imbricated, and the second segment of the hind tarsis is longer. *C. coloradensis* also has the tip of the unguis different, there being two wart-like structures, one at the tip and other slightly back, in *C. soplada* there is only one, situated at the tip.

In Palmer's key to the genus *Cinara* in "Aphids of the Rocky Mountain Region" *C. soplada* keys to couplet eight, and comes most nearly agreeing with requirements for *C. flexilis* (G&P) from which it can be differentiated at once by the fact that the hairs on the first tarsal segment of the hind tarsus are confined to the ventral surface. It should be noted *C. coloradensis* has few and extremely short hairs on the dorsum of the abdomen, and to be keyed to *coloradensis* in Palmer's key, the hair on the ventral surface must be taken to fulfill requirements of couplet six. When *C. soplada* is thus keyed it will not key to *C. coloradensis* because the fourth antennal segment is shorter than one and one half times the total length of the sixth antennal segment. It may be distinguished from *C. piceae* (Panzer) by the distribution of hair on the